



ITERG - IMPROVE

ACTIVITY REPORT



Committed to a healthier, more eco-friendly
world through oils and proteins



IMPROVE

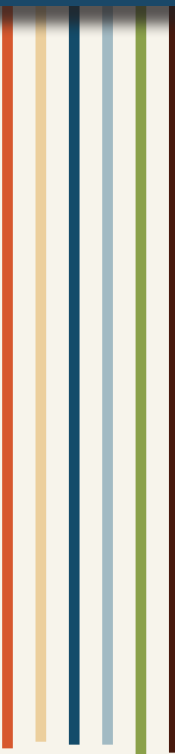


COMMITTED

**to supporting transitions
from biomass to industry**

- Industrial sovereignty and resilience
- Ecological and environmental transition
- Digital transition & Industry of the future

**for sustainable innovation that
boosts industrial competitiveness**



CONTENTS

01

PRESENTATION OF ITERG GROUP P. 6-15

- Values, strengths
- 2024-2025 Strategy
- Public interest work
- Key figures
- Governance
- Social and Environmental Responsibility
- Health and Safety at Work
- Ecosystem

2024 - YEAR IN REVIEW
P. 16-17



02

RESEARCH & INNOVATION P. 18-33

- Industrial sovereignty and resilience
- Ecological and environmental transition
- Digital transition & Industry of the future

03

SERVING INDUSTRY P. 34-41

- Markets
- Industrial Transfer
- Quality Labels
- New service offers

04

TESTIMONIALS P. 42-47

- Testimonial 1 - ABOLIS
- Testimonial 2 - LSDH
- Testimonial 3 - INNOVERT
- Testimonial 4 - EMILE GROUP
- Testimonial 5 - FERMENTALG

05

APPENDICES P. 48-55

- Scientific Committee
- Publications
- Oral Presentations
- Posters
- Qualifications
- Contacts

EDITORIAL

“Through their daily commitment, ITERG Group’s personnel serve the sector by striving to create the sustainable world our societies demand and expect!”



Yves DELAINE

ITERG President
IMPROVE President



Denis CHÉREAU

ITERG CEO
IMPROVE CEO

2024 was characterized

by drive and innovation

Once again, 2024 showcased the energy of ITERG and its teams, reflecting their drive to strengthen the institute’s position as a leading innovator in the field of vegetable oils and plant proteins. In a context of ecological transition and growing challenges linked to sustainable food production, our expertise has proven more relevant than ever.

Our teams redoubled their efforts to support manufacturers in their quest for innovation and sustainability. We processed record volumes of plant-based materials, carried out an impressive number of analyses, and expanded our international client portfolio. This growth reflects the trust placed in us by our partners and the relevance of our services.



Tangible results that support the industry

These efforts allowed us to increase our turnover from professional services while also accelerating market entry for products that stem from internal innovations, for example, our line of Estolides destined for the cosmetics and bioplastics markets.

Our research and innovation priorities are firmly aligned with the major challenges for the future. They were formalized in our Performance Agreement (COP) that was signed in June 2024 in the presence of Roland Lescure, Minister for Industry. We have intensified our work to enhance agricultural resources, optimize transformation processes, and develop new products with high added-value. Our commitment to sustainable practices has led to significant progress in reducing the environmental impact of our activities and those of our clients. A CSR assessment of ITERG was carried out in 2024, allowing us to develop an action plan that will be implemented over the next two years.

A comprehensive offer made possible by a synergy of expertise

2024 was also characterized by stronger collaboration with our subsidiary IMPROVE, thus consolidating ITERG Group's offer. This synergy allows us to offer even more comprehensive expertise, from characterizing raw materials to industrializing processes. Within the framework of Alliance, which brings together ITERG Group and PIVERT, an event was organized on 15 October 2024 at Venette, on PIVERT's premises. The event was open to our clients and brought together 81 participants for various workshops presenting the main skill areas of our three structures. The acquisition of PIVERT by ATV Technologies on January 15, 2025, is expected to seal our continued collaboration and enhance our ability to serve clients in areas complementary to those of ITERG Group.

Ambitious modernization with the AZIMUT project

ITERG's increased economic performance over the last two years has allowed us to relaunch a project to modernize our site in collaboration with Terres Inovia. This project, called AZIMUT, includes building a 600-square-meter storage zone and modern offices on two floors. It aims to increase operational capacity and optimize workflows. It also involves renovating the buildings that house our analytical laboratories as well as the seed processing and oil refining workshops.

Reaffirmed ambitions for 2025

As we move into 2025, we are more than ever determined to meet the challenges of our sector and equip our Industrial Technical Center with the best facilities and technologies for the future. Our mission remains the same: to support industry in its transformation, promote sustainable innovation, and help shape the future of food and bioproducts.

We want to express our sincere gratitude to our teams for their unwavering commitment, and to our partners for their continued trust. Together, we'll continue to push the limits of innovation toward a healthier and more sustainable future.

PRESENTATION OF THE ITERG GROUP

01



COMBINE KNOWLEDGE, MULTIPLY SOLUTIONS

Bringing together technological progress and preservation of our planet requires close and continual collaboration between research and industry. This synergy allows us to accelerate the transition toward greener and more resilient systems by capitalizing on the potential of vegetable oils and plant proteins in strategic sectors such as food, health, agriculture, and industry.

By placing this approach at the core of its actions, the ITERG Group, that unites the ITERG Industrial Technical Center and its subsidiary IMPROVE, is a driving force in the evolution of markets linked to vegetable oils and alternative proteins.

In this way, we support businesses by serving as a catalyst for innovation, helping them anticipate societal challenges, meet regulatory requirements, and strengthen their competitiveness with a long-term sustainable outlook.

UNIQUE EXPERTISE, GLOBAL APPROACH:



Analysis



Processes



Nutrition



Green Chemistry



Environment



Formulation



Training



Audit & Consulting



Information
Monitoring



6

Scientific and technological
platforms

300

Tons of plant-based
materials processed

84

% scientific and
technical staff

126

People
at your service

OUR VALUES AND AMBITIONS:



People at the heart of our performance and success

Our ambition: federate a competent
and engaged collective that serves our
clients and tomorrow's challenges.

ZOOM

discover our film:
"At the heart of our values"

<https://youtu.be/xav7Clz5kQs>



Committed to future generations

Our ambition: accelerate the
transition to a healthier more
sustainable future



A competitive and sustainable oilseed and protein sector

Our ambition: reinforce French
excellence from grains to finished
products in diverse markets.

OUR STRENGTHS:

- ▷ ITERG/IMPROVE synergy on expertise in fats and proteins
- ▷ Positioning from raw materials to markets
- ▷ Diverse expertise to address complex issues
- ▷ Capacity to handle high-volume production

2024-2027 STRATEGY

7 June 2024,

11 Performance Agreements (COPs) for Industrial Technical Centers (CTIs) and Professional Economic Development Committees (CPDEs) were signed for the 2024–2027 period.

These contracts build on previous agreements and set targets for CTIs and CPDEs to support French businesses in the ecological and energy transition, digital transformation, and development of industrial sovereignty.



Within this framework, ITERG focuses on three major themes with a resolutely ambitious roadmap toward 2027. Concrete, targeted actions are defined to help companies in the oilseed-protein sector meet tomorrow's challenges, with the goal of ensuring sustainable growth and competitiveness across the industry.

1 INDUSTRIAL SOVEREIGNTY AND RESILIENCE

ITERG aims to encourage more sustainable and balanced food alternatives thanks to a biorefinery approach that makes full use of all oilseed components. Our priorities are improving the safety and quality of production, developing advanced methods of analysis, and supporting startups and innovation to reinforce competitiveness in the sector (see pp. 20–25).

2 ECOLOGICAL AND ENVIRONMENTAL TRANSITION

ITERG is committed to improving efficiency in industrial processes and ensuring their sustainable integration, with a focus on decarbonization and innovation in plant-based chemistry. These actions target the optimization of extraction processes, the development of methods to evaluate environmental impact, and supporting SMEs in the transition to biosourced solutions (see pp. 26–29).

3 DIGITAL TRANSITION & INDUSTRY OF THE FUTURE

ITERG has placed the digital transition at the heart of its roadmap by integrating Artificial Intelligence and process automation. By relying on skills development within our teams and new partnerships, the center aims to assess the impact of emerging technologies and transfer innovations to industry to boost performance across various application markets (see pp. 30–33).

GENERAL INTEREST MISSIONS

As an Industrial Technical Center (CTI) in the vegetable oils and plant proteins sector, ITERG plays a vital role in improving quality standards, resolving disputes, and helping manufacturers meet regulatory and scientific challenges. Through its public interest missions, ITERG provides essential support to stakeholders in the sector.



STANDARDIZATION

**GUARANTEEING QUALITY
AND SAFETY STANDARDS**

ITERG actively contributes to elaborating and maintaining national and international standards and regulations.

Our participation in expert groups at AFNOR, CEN and ISO, along with our work with the International Olive Council, helps align analytical and sensory methods with the latest requirements.



DISPUTE RESOLUTION AND CRISIS MANAGEMENT

SCIENTIFIC EXPERTISE THAT SECURES COMMUNICATION

ITERG assumes the role of independent arbiter and scientific authority in cases of commercial disputes or health crises. As an internationally-recognized laboratory, we provide reliable and certified analyses, thus offering an objective response to disputes over product quality.



STRATEGIC WATCH

ANTICIPATE EVOLUTIONS IN THE SECTOR AND AID IN DECISION MAKING

ITERG monitors scientific, technical, and regulatory progress in order to provide businesses with reliable, pertinent information carefully selected from a large volume of data. Thanks to the regular diffusion of publications, ITERG facilitates access to news in the sector and supports professionals in their decision making.

ZOOM



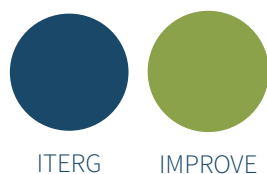
On 24 and 25 October 2024, Lionel LAGARDERE participated in an international meeting on standardization for oils and fats.

Objectives:

revising standards (ISO 5555, 660, 21846), new projects on detecting contaminants, and cooperation with IOC and FEDIOL.

Alongside international experts, ITERG is committed to improving methods of analysis and reinforcing quality and traceability in the sector.

KEY FIGURES FOR 2024

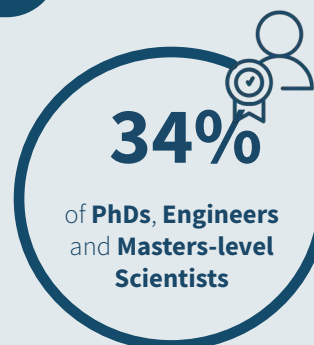


**€3,574 k
IMPROVE**

**€9,299 k
ITERG
Distribution of
resources**

74% Turnover
26% Collective resources

Evolution of resources over 3 years in €k



**Scientific expertise
among staff**

**The women and men
of ITERG Group**



Workforce
126 employees



**Pay equity
Women-Men**

89/100

ITERG's score
according to the
Labor Code scale



BOARD OF DIRECTORS

on 07.03.2025

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Ms. **Laura GRISAT**, Deputy director of chemistry, materials and eco-industries, Ministry of Economy and Finance - DGE
Ms. **Marie-Laure WOLF**, Director of the chemistry project, Ministry of Economy and Finance - DGE
Mr. **Francois-Xavier TURQUET**, Head of the bio-sourced chemistry and industrial biotechnology project, Ministry of Economy and Finance - DGE
Ms. **Maud IACOMELLI**, Ministry of Agriculture and Food - DGPE/SDFE/SDFA/BGC

GENERAL ECONOMIC AND FINANCIAL AUDITOR

Mr. **Hubert GICQUELET**, "Applied Research and Quality Promotion" Mission, Ministry of Economy, Finance, and Industrial and Digital Sovereignty, CGEFI

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Mr. **Hervé LIMOUZIN**, BU Director at ADM SIO

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Mr. **Laurent ROSSO**, Director of Terres Univia
Ms. **Monique AXELOS**, Scientific Director of Food and Bioeconomics, INRAE
Ms. **Sophie LECLERE**, Director of Innovation and Development, Natural Ingredients and Actives EXPANSCIENCE
Mr. **Fabrice MOULARD**, Oilseeds Federation

AUDITOR

Mr. **Mathias TAN** (GTAC)

OBSERVERS

Mr. **Hubert BOCQUELET**, FNCG Managing Director
★ Mr. **Gabriel KRAPP**, Chairperson of the Quality Commission FEDIOL
Mr. **Patrick GUILLEMOTEAU**, NOUVELLE AQUITAINE REGION

STAFF OBSERVERS

Ms. **Marie REULIER**, ITERG
Mr. **Christophe VINGHES**, ITERG

GOVERNANCE

Yves DELAINE
ITERG President
IMPROVE President



Paul-Joël DERIAN
ITERG Vice-President

Denis CHÉREAU
ITERG CEO
SAS IMPROVE CEO



Jean-David LEAO
ITERG Deputy CEO

★ Mr. **Jean d'ORSETTI**, PICARDIE INVESTISSEMENT
★ Mr. **Christophe GRIFFART**, CRÉDIT AGRICOLE
★ *Members of the IMPROVE Board of Directors*

SOCIAL AND ENVIRONMENTAL RESPONSIBILITY

For the period 2024-2025, ITERG laid out a voluntary action plan that aims to consolidate its Corporate Social Responsibility (CSR) commitments.

In alignment with its 2024-2027 Performance Agreement (COP), the institute carried out a CSR diagnostic to identify its strong points, paths for improvement, and actionable priorities.

ZOOM

Discover our CSR report online:

<https://bit.ly/4i40KiB>

STAKEHOLDER ANALYSIS

ITERG carried out an in-depth analysis of its internal and external stakeholders in order to better understand their expectations and tailor its engagement strategies accordingly. Nine key stakeholder categories were identified, bringing together the main groups that influence or are affected by the institute.

A STRUCTURED APPROACH AND DEDICATED RESOURCES

Our approach is centered around six strategic focal points, organized into three fundamental pillars.

This approach allows us to precisely evaluate the institute's performance in terms of community engagement, sustainable environmental management, and economic performance.

It highlights key areas for improvement that will allow us to boost our impact and concentrate our actions in a process of continual progress.

100,000

euros invested

6

strategic focal points

18

vectors defined in the action plan





ENVIRONMENTAL RESPONSIBILITY

1 ITERG takes concrete actions to reduce its environmental footprint by leaning on reasonable usage of natural resources, energy efficiency, waste management, and the recovery of co-products.

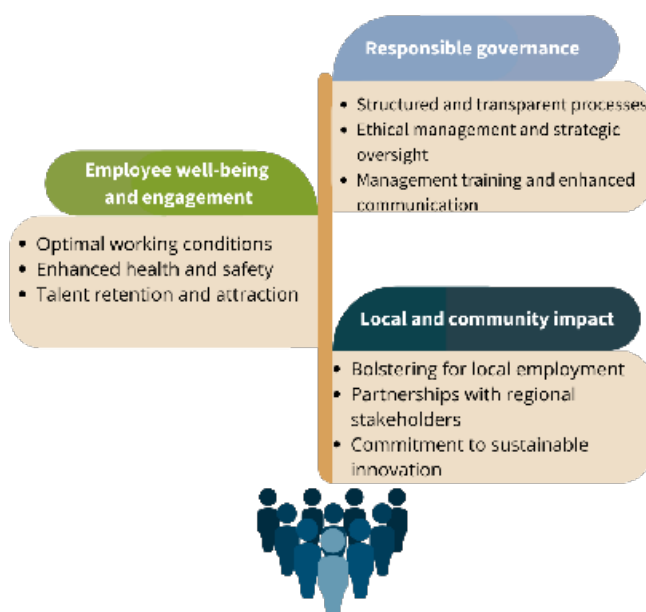
Our priority actions include optimizing water and energy usage, ensuring compliance in wastewater discharge, reducing odor pollution, and promoting sustainable mobility. These initiatives demonstrate ITERG's commitment to a responsible and sustainable ecological transition.

SOCIAL AND COMMUNITY ENGAGEMENT

2 ITERG ensures transparent and accountable governance through structured processes and ethical management that secure the institute's long-term relevance and the trust of its stakeholders. The Institute is grounded in training managers, improving communication, and keeping risk management tools up-to-date to reinforce its strategic steering.

3 Attentive to its employee's well-being, ITERG fosters working conditions that support professional fulfillment, health, and safety. This approach helps to strengthen engagement, build a climate of trust, and attract long-term talent.

4 ITERG actively contributes to local development by working with regional stakeholders, supporting local employment, and engaging in sustainable innovation projects. This commitment reflects its community values and strengthens its economic and social impact in Nouvelle-Aquitaine.



ECONOMIC PERFORMANCE

5 ITERG strives for the sustainable economic performance required to support innovation and meet the challenges of tomorrow by consolidating business relationships, optimizing investments, and guaranteeing equitable sharing of the value created. Analytical tools help us to anticipate risks and align growth with our overall strategy.

6 The institute guarantees the safety and quality of its products by applying rigorous norms (HACCP, BPF, ISO 9001) and actively monitoring regulatory requirements. We promotes sustainable consumption through eco-design and initiatives like the Clean Label, while maintaining attentive and proactive client relations.

OCCUPATIONAL HEALTH AND SAFETY



Protecting the health and safety of employees and external collaborators is a core commitment for ITERG.

Guaranteeing safe working conditions and controlling the risks associated with our activities is an integral part of the company's priorities, along with ensuring quality services and client satisfaction.



OUR EXECUTIVE MANAGEMENT SPEARHEADS THIS STRONG COMMITMENT

Through its Occupational Health and Safety Policy, management reaffirms its commitment to building a lasting culture of prevention and deploying all necessary measures to manage risks effectively. This commitment relies on some key principles:

- ▷ Compliance with legal and regulatory requirements, supported by a clear and structured organization.
- ▷ Ongoing awareness and training programs to build a strong culture of prevention.
- ▷ Regular communications through a variety of channels (safety bulletins, team meetings, intranet).
- ▷ Constant assessment and updating of risks, with rigorous monitoring of preventive measures.
- ▷ Review of all incidents and accidents (both major and minor) to identify vectors for improvement and prevent recurrences.



CONCRETE ACTIONS AND REINFORCED MONITORING

ITERG implements preventive measures tailored to its activities, with health and safety KPIs reviewed by the management committee and shared monthly with all staff. The company also continues to reinforce behavior-based audits. In 2024, 100% of our employees carried out at least one audit with an average conformity rate of 90.5%.

To facilitate access to essential information even further, a page dedicated to occupational health and safety was created on intranet. It contains key resources such as incident management, evacuation procedures, safety data sheets, and a reminder of the emergency number.



SHARED ACCOUNTABILITY FOR A SAFE WORKING ENVIRONMENT

The policy's success depends on the implication of every person. Every employee has a role to play in ensuring a safer workplace by respecting and upholding the safety measures, reporting any issues, and actively taking part in prevention efforts.

OUR ECOSYSTEM

SECTOR	COMPETITIVE CLUSTERS	REGIONS
<div>  </div> <div>  </div> <div>  </div> <div>  </div>	<div>  </div> <div>  </div> <div>  </div> <div>  </div> <div>  </div>	<div> Nouvelle-Aquitaine </div> <div>  </div> <div>  </div> <div>  </div> <div>  </div> <div> Hauts de France </div> <div>  </div> <div>  </div> <div>  </div> <div>  </div> <div>  </div>
NETWORKS	BIOMASS DEVELOPMENT	
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2024 - YEAR IN REVIEW

JANUARY

FoodHack Meetup 2024 (Shakeup Factory and EIT Food) 17 Jan (Paris)
Denis CHÉREAU

ECOQUALINA 2024 Steering Committee – 22 Jan (Bordeaux)
Fabrice BOSQUE

4th edition Lipids & Cosmetics – 24-25 Jan (Bordeaux)
Guillaume CHOLLET, Cécile JOSEPH

3BCAR Seminar: collaboration ideas and capacity-building projects – 25-26 Jan (Montpellier)
Lou BERNARD, Boris BIZET, Jean David LEAO

Renewal of ISO 22716 GMP certification from 25 Jan 2024 to 24 Jan 2027
for contract manufacturing of cosmetic ingredients (service provision)
within the Non-Food Valorization Department (ASI) workshops.



FEBRUARY

Tech Day (B4C) Formulating Biosolutions for Agriculture 6 Feb (Lille)
Cécile JOSEPH

Biotechnology Process Industrialization Days – EPI Bioscale, 7-8 Feb 2024 (Compiègne)
Denis CHÉREAU

MARCH

CFIA – Food Industry Trade Show, 12-14 Mar (Rennes)
Presentation of the IFoodEA initiative

Alimentaria 18-21 Mar (Barcelona)
Franck DEJEAN, Patrick LE RUNIGO

Cosmoprof 21-23 Mar (Bologna, Italy)
Fabrice FARRUGIA, Jérôme VILA



APRIL

VITA'CONNECT 4 Apr 2024 (Dijon)
Marwa KADI

8th International Conference on Food Digestion 9-11 Apr 2024 (Porto)
Nutrition Life Sciences Team

IN-COSMETICS 16-18 Apr (Paris)
Lou BERNARD, Franck DEJEAN, Fabrice FARRUGIA, Marie REULIER, Lucile SARRAZY, Jérôme VILA

AOCS Congress (American Oil Chemist Society) 28 Apr - 1 May (Montreal)
Frédéric BAUDOUIN, Melany GENOT, Hugo MEAR

COFRAC accreditation for the GC-MS/MS phthalate quantification method



MAY

VITAFOODS 14-16 May (Geneva)
Carole VAYSSE, Fabrice FARRUGIA

PLANT PROTEIN INNOVATION CENTER Meeting 2024 (PPIC) 22-23 May (Minneapolis – USA)
Denis CHÉREAU

General Assembly of the OQUALIM Association 30 May (Paris)
Laura KRIEGER

Job Forum – Lycée Saint Louis de Bordeaux – Careers in Chemistry BTS 23 May
Franck DEJEAN, Nathalie HERVY



Signing of the Performance Agreement between the Ministry of Industry and Energy, the National Federation of Oils and Fats Industries (FNCG), and ITERG
(Yves DELAINE et Denis CHÉREAU 7 Jun)

12th Workshop on fats & oils as renewable feedstocks for the chemical industry – (ABIOSUS) - 3-5 Jun (Dortmund)
Boris BIZET



Bridge2Food Europe 2024 - 4-5 Jun (La Haye –Netherlands)
Abderaffik MERMOURI

TECHNO'UILE Day - 7 Jun (Nimes)
Lionel LAGARDÈRE

Joint GLN-GPN Day – 7 Jun (Paris)
Leslie COUDELO, Benjamin BUAUD

Food & Health Days (15th edition) - 19-20 Jun (La Rochelle)
Franck DEJEAN, Fabrice BOSQUE, Patrick Le Runigo, Benjamin BUAUD, Marwa KADI

JUNE

24 Hours of BIOECONOMY for CHANGE (B4C) 4-5 Jul (Beauvais)
 Laura DEVOT, Jean David LEAO, Guillaume LE CLOIREC

JULY

AUGUST



HIGH OLEIC Congress 2024 (HOC 2024) 4-5 Sep (Pau)
 Didier PINTORI, Fabrice FARRUGIA

PROTEINS Day France (General Assembly) 11-12 Sep (Amiens)
 Denis CHÉREAU

I FEEL GOOD (Paris) 17-18 Sep (Paris)
 Marion CLEMENS, Fabrice FARRUGIA

19th GERLI Lipidomics: Lipids from sea to fork 23-26 Sep (Brest)
 Leslie COÛEDELLO

SEPTEMBER

OCTOBER

AGRI SUD-OUEST INNOVATION 1 Oct (Mérignac) B2B meetings
 Fabrice FARUGIA

NUTREVENT 2024 1-2 Oct (Lille)
 Frédéric BAUDOUIN, Mélanie GÉNOT, Guillaume LE CLOIREC, Patrick LE RUNIGO

FUTURE FOOD TECH 2024 2-3 Oct (London)
 Jean David LEAO, Didier PINTORI

BRIDGE2FOOD NORTH AMERICA 8-10 Oct (Minneapolis - USA)
 Frédéric BEAUDOUIN

COSMETIC 360 16-17 Oct (Paris)
 Fabrice FARRUGIA

ADEBIOTECH 16-17 Oct (Paris)
 Leslie COÛEDELLO, Cécile JOSEPH

PINK OCTOBER: 19-20 Oct

ABIM (Annual Biocontrol Industry Meeting) - 21-23 Oct (Bâle - Suisse)
 Cécile JOSEPH

SHAKEUP FACTORY - IFFI (meeting on the themes of decarbonization, recycling) 25 Oct (Paris)
 Denis CHÉREAU



Renewal of IOC approval for physico-chemical and sensory analysis of olive oils
 (November 2024 to November 2025)

CHEVREUL Days 2024 (New sources of oils and fats) 4-5 Nov (Paris)
 Jean-David LEAO

Technical Day Eco-Design Techniques - 15 Nov (Pessac)
 Fabrice BOSQUE, François LEROY

FOOD INGREDIENT EUROPE - 19-21 Nov (Frankfurt)
 Guillaume LE CLOIREC, Jean-David LÉAO, Patrick LE RUNIGO, Abderrafik MERMOURI

NOVEMBER



DECEMBER

CIFRE PhD Defense
 Lina TOUTIRAIS



RESEARCH AND INNOVATION

02



A COMMITTED PLAYER AT THE HEART OF INDUSTRIAL INNOVATION

To address the major challenges of the food, environmental, and industrial transitions, ITERG is pursuing an ambitious research strategy built on strong partnerships, diversified funding sources, and deep integration into innovation ecosystems.

As an Industrial Technical Centre (CTI), the institute relies on dual capacity building, both upstream and downstream, combining academic research and industrial monitoring to develop practical, sustainable solutions tailored to the industry's needs.

This unique positioning allows ITERG to serve as a driving force for innovation at the national, regional, and European levels by fostering the valorization of vegetable oils and plant proteins to support make industry more competitive and sustainable.



DID YOU KNOW?

ITERG is accredited under the Research Tax Credit (CIR) scheme as an Industrial Technical Centre (CTI) carrying out research and development (R&D) work on behalf of companies. This allows companies to include subcontracting costs paid to ITERG in their CIR declaration.

To learn more, visit:
<https://entreprendre.service-public.fr/vosdroits/F23533>





34

% of scientific staff
≥ MASTER'S LEVEL

2

Ongoing PhD Projects

9

Scientific Publications

17

Active Patents

RESEARCH BUILT ON COMPLEMENTARITY

ITERG offers a **structured range of services** built around two types of projects:

- ▷ collaborative projects that bring industrial and academic partners together around shared challenges.
- ▷ B2B projects tailored to meet the specific needs of individual companies.

Our research strategy is based on **diverse sources of funding**:

- ▷ industry contributions to collaborative research
- ▷ public funding for co-financed collaborative projects
- ▷ private contracts for applied research services

Our innovation dynamic is based on **dual capacity building**:

- ▷ Upstream, through academic collaborations (PhDs, multidisciplinary projects) with partners from the Carnot and CTI networks, ACTIA UMTs (joint technological units) and RMT's (joint technological networks), ANR, ADEME, the Nouvelle-Aquitaine Region, and the European Union.
- ▷ Downstream, thanks to active technological monitoring within the industry, exchanges with equipment suppliers, and cooperation with other technical centers such as Terres Inovia.

ZOOM

A REGIONAL-DEVELOPMENT DYNAMIC

ITERG is an active member of the regional technological transfer ecosystem through its participation in:

- ▷ **ACTENA**, the Association of Transfer Centers in Nouvelle-Aquitaine (created in 2024), whose goal is to make it easier for businesses to access scientific advances and regional technological platforms.
- ▷ The **University Innovation Hub** (PUI), a strategic initiative that accelerates the implementation of research results and fosters the emergence of new technologies.
- ▷ Additionally, a **Regional Technical Committee** created in 2023 in response to a request from the Nouvelle-Aquitaine Region brings independent scientific expertise to ITERG's Capacity Building Program by taking into account the needs of regional socioeconomic stakeholders.

2.1 INDUSTRIAL SOVEREIGNTY AND RESILIENCE

Food quality and safety

Assessment of glucosinolate degradation products

In industrial crushing conditions, glucosinolates, particularly abundant in cruciferous plants such as rapeseed, are mostly broken down into various products, the nature of which depends on the precursor glucosinolates and the environmental conditions.

The method for determining glucosinolate derivatives developed by ITERG is based on extraction and purification followed by GC-MS/MS analysis, and has been validated for oilseed meals and crude oils.

Thanks to recent advances, this method now allows us to quantify 14 derivative compounds, mainly from progoitrin—the predominant glucosinolate in rapeseed—with quantification thresholds in the range of a few hundredths of $\mu\text{mol/g}$.

This method is now offered in ITERG's Analysis Catalog to help stakeholders in the sector monitor the quality of oilseed meals.

PFAS in vegetable oils: developing a method of quantification.

Per- and polyfluoroalkyl substances (PFAS) are a major concern due to their potential effects on health. In response to EFSA's opinion, maximum levels have been set for certain foods (EU Regulation 2022/2388).

Currently, there is no standardized method for quantifying PFAS in vegetable oils. In 2024, ITERG launched a project to develop an analytical method for quantifying 12 PFAS in oils and oilseed-derived products, with an initial phase—more extensive than expected—dedicated to “decontaminating” the analytical system.

This project will help improve health and safety monitoring of vegetable oils and anticipate potential regulatory developments.

Loïc LEITNER

Head of the R&D and Innovation Department, Analytical Development
ITERG





MOSH/MOAH: Understand, Detect, Act

Having reliable analyses to ensure food safety is a complex and critical task that requires advanced technical skills, cutting-edge scientific expertise, and in-depth knowledge of current standards and regulations. The expertise we've developed over the last 30 years working with mineral oils now allows us to help manufacturers who are facing this problem across the fats and oils production and processing sectors, in both the food and cosmetics industries.

Our in-depth knowledge of lipids ensures accurate interpretation of results and effective support for our partners, especially in identifying sources of contamination. An on-site industrial audit by one of our experts can further enhance the analytical assessment.

COFRAC's accreditation of our method for determining MOSH-MOAH (mineral oil saturated and aromatic hydrocarbons) with very low quantification thresholds (1 mg/kg for oils) reflects our laboratories' excellence. It also demonstrates our capacity to adapt to needs, by developing a method that guarantees precise and reliable analysis results.

View our scope of accreditation at www.cofrac.fr

Franck DEJEAN

Head of the Analysis and Expertise Department
ITERG

DID YOU KNOW?

ITERG's laboratories are the only French labs included in the list of laboratories recognized at the European level by SCoPAFF (the Standing Committee on Plants, Animals, Food and Feed) for the analysis of mineral oil aromatic hydrocarbons (MOAH) in food products.

SCoPAFF recognition is proof of the trust European authorities place in us and reinforces our position as a leader in food analysis.

ZOOM

Read the interview with Laura BRUNSART on mineral oils in the 2024 Oqualim Journal of Plans: <https://bit.ly/4coTNaJ>

More agile, more responsive: ITERG reaches a new milestone with Flex 3 accreditation

At the start of 2025, the French Accreditation Committee (COFRAC*) granted ITERG authorization to operate with Flex 3 flexibility.

This flexible accreditation profile offers greater freedom to the laboratory, but also comes with added obligations and increased responsibilities.

It gives ITERG authorization to develop its own methods of analysis and accredit them without previous assessment by COFRAC.

To do so, the laboratory must validate the method of analysis before emitting accredited results. This profile allows ITERG to be more responsive to regulatory evolution and the needs of its clients.

FLEX 3 accreditation strengthens our quality management approach by providing advanced tools for traceability, performance monitoring, and risk management.

It is a strategic tool to ensure that every test carried out in our laboratory not only meets requirements, but also continuously improves in order to meet our partners' and clients' highest expectations.

Our analytical expertise combined with deep knowledge of lipids supports oil producers and those who use fats.

DID YOU KNOW?

Reinforcing our analytic expertise

In 2024, COFRAC* accredited three new methods of analysis:

- ▷ Determination of trace-element content by ICP-OES – NF ISO 21033 – (Al, Cd, Cr, Cu, Fe, Ni, Pb, Sn)
- ▷ Determination of trace-element content by ICP-OES – In-house method – (Arsenic)
- ▷ Determination of phthalate content – Vegetable-based fats – In-house GC-MS/MS method

*scope available at www.cofrac.fr

Franck DEJEAN

Head of the Analysis and Expertise Department
ITERG



IMPROVE participates in the elaboration of an official AOCS method on the denaturation of plant proteins

Plant proteins have received much attention over the past decade, but there remains a significant lack of standardization in analytical methods. Among these methods, measuring the denaturation of plant proteins remains particularly complex. It generally requires costly equipment or is only applicable to a single type of raw material.

IMPROVE took part in an AOCS initiative to standardize a method for assessing the denaturation rate of plant proteins based on their solubility. IMPROVE also participated in interlaboratory tests to validate the method.

The method has now been standardized and was published in a scientific journal. **The protocol is easy to implement in research laboratories and factories, and makes it possible to routinely monitor protein quality and prevent denaturation during the manufacturing process.** It is now used on a regular basis and is part of IMPROVE's service offering to clients.

Method:
Protein Solubility Index (PSI) in 5 mM Sodium Hydroxide
AOCS, Ba 15-2023

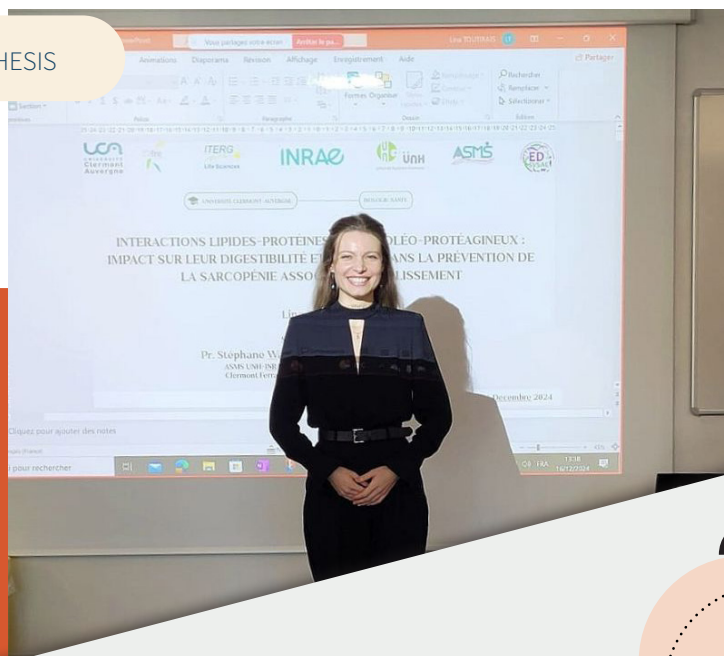
Frédéric BAUDOUIN

Head of the Protein Characterization and Applications Division,
IMPROVE



Age better thanks to plant proteins

PROLIDIA DOCTORAL THESIS



Limited animal-protein resources and the environmental impact of their production have led to a growing demand for more plant-based food products.

In this context, the PROLIDIA project focused on evaluating the nutritional value of proteins derived from oilseeds (which are naturally rich in lipids), by examining how lipid-protein interactions affect their digestibility and assessing their potential to help prevent age-related sarcopenia.

Carried out in partnership with Stéphane Walrand's team (Food, Muscle Health and Sarcopenia – ASMS; UMR 1019 / INRAE Human Nutrition Unit) as part of a Cifre PhD project (2021–2024), this study shows that oilseed proteins (rapeseed, sunflower) hold strong potential for human nutrition. In fact, the digestibility of these proteins is comparable to that of pea protein and they show a similar capacity to prevent muscle loss when compared with pea protein or casein.

Another original finding in this work is clear evidence of the modulatory role played by added lipids in these protein matrices in their in vitro digestibility.

All of these results were presented by Lina Toutirais during her thesis defense on 16 December 2024.

[Read the summary of Lina TOUTIRAIS' doctoral thesis](#)

NEW

As the links between nutrition and health become increasingly well established, it is essential to stay up to date with scientific advances on the benefits of lipids and related nutrients.

Starting this year, the Nutrition Life Sciences team publishes a monthly summary of the latest findings on the health effects of one or more nutrients, aligned with its research priorities.

Consult these monitoring reports directly on the Nutrition Life Sciences' LinkedIn page.

<https://bit.ly/3EgbQDo>

Carole VAYSSE

Head of the Nutrition Life Sciences Unit
ITERG

Formulating with plant-based proteins and fats for a healthier, more sustainable diet

NEW EPICES PHD PROJECT

The EPICES PhD project in formulation and physicochemical analysis aims to bridge the gap between fundamental knowledge of plant-based proteins and fats and their application in food models.

The first phase of the project will focus on selecting and characterizing protein ingredients in order to analyze their composition and identify their specific properties. The second phase objective will be to study their functional properties in-depth, in particular by assessing their absorption capacity at water oil/ interfaces. These analyses will make it possible to establish clear correlations between their behavior within formulations and their composition.

Finally, these ingredients and formulation strategies will be integrated into food models like margarine, cheese, yogurt, cream, and vinaigrette to serve as proof of concept. This work will serve as the basis for a nutritional evaluation to be carried out in future projects.

This project is part of the ACTIA PROFEEL (Plant Lipids and Proteins for Bioavailable and Sustainable Formulations) UMT (joint technology unit).

Partner: Véronique Schmitt, Paul Pascal Research Center (CRPP, University of Bordeaux).

Rose GAZEAU

PhD student
ITERG



2.2 THE ECOLOGICAL AND ENVIRONMENTAL TRANSITION



Formulation

Developing biosolutions made with essential oils for weed management

Cécile JOSEPH
Formulations Project Manager,
ITERG

The FORMULBIO project aims to formulate and assess the effectiveness of herbicidal biosolutions based on essential oils and the metabolites they contain.

The challenge is to design formulations suited to the practical constraints faced by farmers who dilute and spray their solutions, while also addressing application needs such as plant adhesion, persistence, drift, and stability.

Building on previous studies by the Agroecology UMR (joint research unit) in Dijon that showed the herbicidal effects of several essential oils and metabolites, the biosolutions will be optimized and tailored to the active compound used. The formulation strategy is based on compartmentalized formulas using co-formulants and adjuvants that incorporate lipids (emulsions, Pickering emulsions, and oleogels).

These biosolutions will be optimized by studying the impact of various formulation parameters on effectiveness. Their effectiveness and selectivity will be evaluated on plants under controlled conditions, then outdoors, followed by ecotoxicological analyses of the most promising biosolutions.

Partner: Jean-Phillipe Guillemin, Institut Agro Dijon (INRAE, University of Bourgogne)



Processes

Combining energy efficiency and innovation to produce ingredients sustainably

Food-ingredient production has a significant environmental impact, especially in terms of water use and greenhouse gas emissions associated with the consumption of reagents and energy.

To address these challenges, IMPROVE is taking action on two complementary fronts:

1 - Optimizing energy consumption during processing

IMPROVE has developed a comprehensive range of services that includes **energy consumption measurement** to reduce environmental impact, cut costs, and improve energy efficiency.

2 - Innovating to design more efficient and energy-conscious processes

IMPROVE has developed an innovative (patented) process for producing ingredients enriched with plant proteins **that are less energy-intensive** and deliver higher quality, combining the ITERG Group's expertise in green chemistry and processing with its know-how in plant proteins.

By improving existing processes and developing breakthrough solutions, IMPROVE supports industry in the transition toward more responsible food production.

Amadou SIDIBE

Head of the Wet Fractionation Division,
IMPROVE

Environmental impact

New developments in evaluating the environmental impact of packaging

The PACK-AGB project, co-funded by ADEME, has improved the evaluation of packaging in the AGRIBALYSE® database—a public resource on the environmental impacts of agricultural and food products—whose version 3.2 was released in early 2025.

Alongside other project partners (ACTALIA, CTCPA, IFIP, IFV, ITERG, IPC, and Bleu Safran), ITERG took part in developing a methodology for modeling the environmental impacts of food-product packaging using Life Cycle Assessment (LCA).

This approach takes into account material production, shaping processes, end-of-life packaging management, and the benefits of using recycled raw materials, recycling, and energy recovery from packaging.

This methodology was used to build approximately 500 Life Cycle Inventories for packaging solutions.

Cynthia VIALATTE

Environment & Eco-Industries Project Manager,
ITERG

PROJET PACK-AGB
Contribution à l'amélioration des emballages dans la base de données Agribalyse® 3.2.

AGRIBALYSE®
Données et impacts environnementaux de plus de 2500 produits alimentaires moyens représentatifs des produits vendus et consommés en France.

CYCLE DE VIE D'UN PRODUIT

0.18
Impact carbone (kg CO2e/kg produit)

1 Catalogue de solutions d'emballages
486 Solutions d'emballages
1130 Produits alimentaires représentés soit 50% des produits d'Agribalyse®
5 Filières agroalimentaires

1 Méthodologie clé en main pour modéliser des solutions d'emballages pour AGRIBALYSE® et basée sur les dernières recommandations Analyse de Cycle de Vie (ACV) de l'ADEME 2022
230 Données de matériaux, transport, procédés, fin de vie

Résultats
La prise en compte des emballages dans AGRIBALYSE® :

D'une modélisation simplifiée...
Production du verre et mise en forme du bocal (1) | Transport d'approvisionnement du verre (train-péniche-camion) | (Bocal sur Sig de produit fini)

...Vers une modélisation ACV complète alignée avec le cadre méthodologique européen du PCR

AVANT PACK-AGB (AGP 3.1)
Production du verre et mise en forme du bocal avec pertes associées (2)(3) | Transport d'approvisionnement du verre (train-péniche-camion) | Fin de vie du verre (2)(4)

APRÈS PACK-AGB (AGP 3.2)
Production de l'acier - couvercle (2)(3) | Mise en forme du couvercle, vernis et pertes associées | Transport d'approvisionnement de l'acier (train-péniche-camion) | Fin de vie de l'acier (2)(4)

Production du papier et de la colle - étiquette (2)(3) | Mise en forme de l'étiquette, vernis et pertes associées | Transport d'approvisionnement du papier (train-péniche-camion) | Fin de vie du papier et de la colle (2)(4)

Production, mise en forme et fin de vie de l'emballage secondaire et tertiaire (2)(4) | (Bocal sur un format détaillé de produit)

Applications
L'affichage environnemental des produits alimentaires
• Meilleure prise en compte de l'emballage dans le score environnemental du produit
• Différenciation intra-catégorie des produits possible par le choix de la solution d'emballage

Liée-conception des emballages
• Catalogue de solutions d'emballages clé en main
• Bibliothèque d'ACV d'emballage pour adapter au créier des solutions d'emballages

Avec le soutien de

PARTENAIRES
ACTALIA, CTCPA, IFIP, IFV, ITERG, IPC, Bleu Safran

FINANCEURS
ADEME, Région Île-de-France, Région Auvergne-Rhône-Alpes, Région Occitanie, Région Nouvelle-Aquitaine, Région Grand Est, Région Bretagne, Région Pays de la Loire, Région Centre-Val de Loire, Région Normandie, Région Hauts-de-France, Région Île-de-France, Région Auvergne-Rhône-Alpes, Région Occitanie, Région Nouvelle-Aquitaine, Région Grand Est, Région Bretagne, Région Pays de la Loire, Région Centre-Val de Loire, Région Normandie, Région Hauts-de-France

www.agribalyse.ademe.fr



ECOQUALINA: eco-design at the industry level

Carried out in the framework of the ACTIA ECOVAL RMT (joint technological network), the ECOQUALINA project has assisted 10 quality-certified sectors (SIQO – official signs of quality and origin) in an eco-design approach: Poitou-Charentes, Limousin, and Périgord lamb; Pyrenees milk-fed lamb; Ossau-Iraty cheese; Charentes-Poitou butter; Southwest pork; Bayonne ham; Agen prunes; Marennes Oléron oysters.

This project, co-funded by ADEME and the Nouvelle-Aquitaine Region, was coordinated by AANA and, on the technical side, by CRITT Agro-Alimentaire La Rochelle and ITERG, with participation from other technical partners (ACTALIA, CTIFL, IDELE, IFIP, INRAE).

These 10 sectors now benefit from an environmental assessment of their products and eco-design strategies that have been evaluated from technical, economic, and environmental perspectives to ensure relevance.

The implementation of these different eco-design strategies can potentially reduce the environmental impact of products by 13 to 23% (in the “climate change” category) depending on the sector.

DID YOU KNOW?

A summary of the methodology and results of this large-scale initiative, involving nearly 350 people, is available on the ADEME website:

<https://bit.ly/44pmyC4>

Fabrice BOSQUE

Head of the Environment
and Eco-Industries Unit
ITERG

2.3 DIGITAL TRANSITION & INDUSTRY OF THE FUTURE

Processes

From sunflower to ingredient: using all the biomass sustainably

Sunflowers have strong potential for human nutrition thanks to their nutrient-rich seeds and high-quality oil. Despite its advantages, sunflower has certain limitations that still restrict its use as a protein ingredient.

The ITERG/IMPROVE partnership has made it possible to work on replacing hexane with more sustainable mechanical processes. We've also worked on developing protein purification processes to deliver more functional ingredients with improved sensory quality (notably taste, color, and odor), with the goal of overcoming barriers to the use of sunflower.

In addition, ITERG and IMPROVE's combined expertise and synergy render it possible to meet the challenges of valorizing all biomass components, paving the way for more complete and viable processes.

Amadou SIDIBE

Head of the Wet Fractionation Division,
IMPROVE





50 μm

Processing biotechnology-derived products using mechanical extraction

In the current context of sustainable consumption and environmental challenges, extracting oil from biomass offers several advantages—particularly in terms of sustainability, innovation, and optimizing resources—especially when using mechanical processes that minimize environmental impact and avoid chemical solvents.

This project aims to extract oil from biomass sources that have high lipid content (>60%) but also rigid cell walls, which makes conventional extraction methods less effective.

In order to improve yield, these materials require specific preliminary treatments. ITERG has therefore conducted trials on mechanical yeast oil extraction, focusing in particular on preparing the raw matrix through heat treatment, grinding, and pelletizing to condition the yeast for subsequent pressing. **Initial results have been promising and support the development of a new approach to crushing that improves the effectiveness of pressing while maintaining a balance between yield and technical feasibility.**

This project paves the way for more sustainable exploitation of fatty biomasses.

Jean-Philippe LOISON

Assistant Engineer,
ITERG

Preparing the future of oil mills

AI and digital twins shaping the sector's future

The Actia OLEODIGIT UMT (joint technology unit) was approved by the Ministry of Agriculture and Food Sovereignty and the DGER.

This innovative project responds to the industry's challenges by leveraging the potential of artificial intelligence and digital twins to:

Improve process efficiency

Guarantee optimal quality in products and co-products

Reduce environmental impact

Supported by a Bordeaux-based tripartite partnership between ITERG, the IMS Laboratory, and Terres Inovia, OLEODIGIT aims to accelerate the digitization and optimization of extraction and processing methods for oilseed-protein crops.

With this recognition, we reaffirm our commitment to making the industry more efficient, sustainable, and innovative.

Boris BIZET

Plant-Based Chemistry Project Manager
ITERG

ZOOM

The approach aims to structure a network of sensors to generate a process-based data set that will then be analyzed by artificial intelligence models.

These models will deepen understanding of physico-chemical phenomena (seed, oil, meal), serve as decision-support tools, and feed digital twins to make processes predictive.

The goal is to steer the process according to the desired quality and economic and environmental performance.

In this way, ITERG aims to turn its pilot facilities into industrial demonstrators that allow for better control of crushing and refining processes.

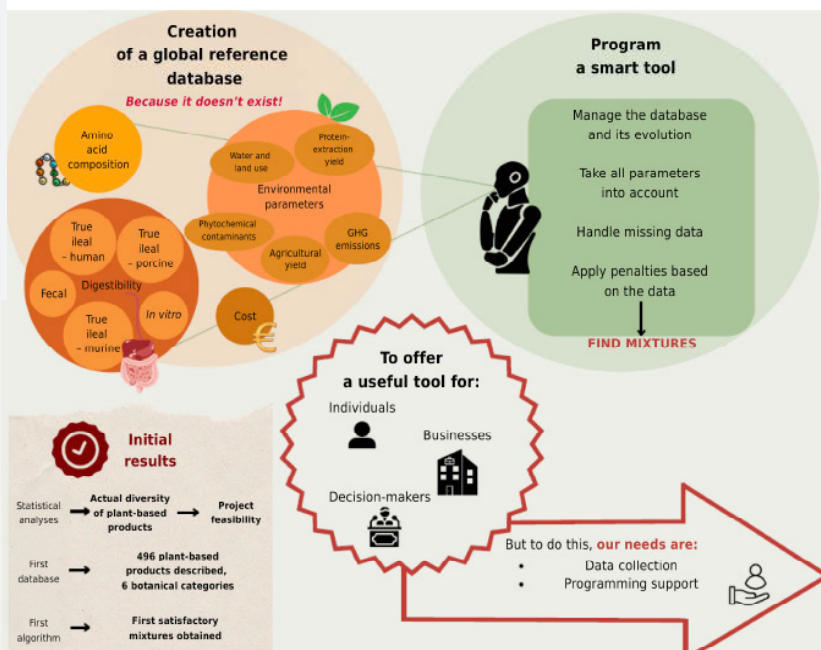


Optimizing plant protein blends to meet the protein needs of older adults: an AI-driven approach

The growing interest in plant proteins calls for a reassessment of their nutritional contribution in older adults, who have specific protein requirements.

To date, it is not possible for older adults to rely entirely on plant proteins while maintaining an adequate multifactorial nutritional status, as plant proteins alone do not replicate the anabolic properties of animal proteins.

In this context, the Laboratory of Fundamental and Applied Bioenergetics (LBFA, Prof. Christophe MOINARD, U1055 Inserm – Grenoble Alpes University) is developing an AI-based tool that uses a database of over 500 plant products to formulate plant protein blends that meet the protein needs of older adults.



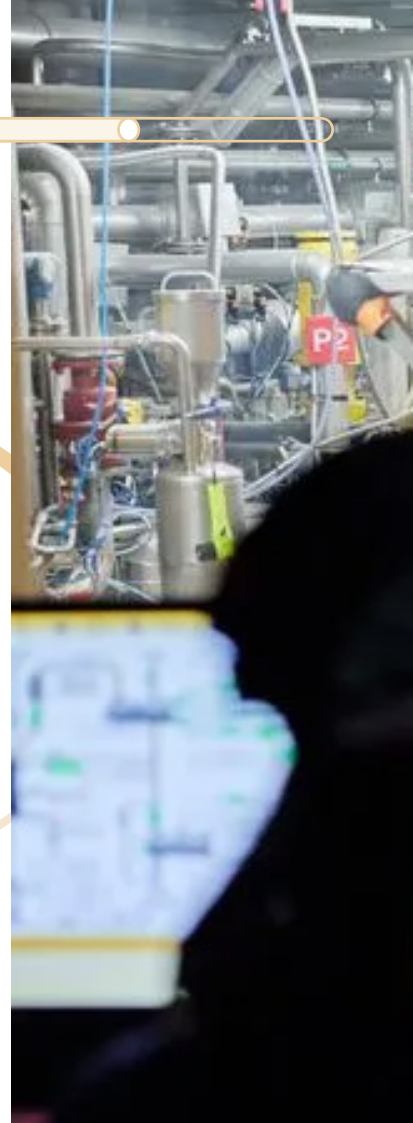
Benjamin BUAUD

Nutrition Life Sciences Project Manager
Coordinator of the Actia PROT&IN RMT
(joint technological network) ITERG



SERVING THE INDUSTRY

03



USING SCIENCE TO BOOST COMPETITIVENESS IN INDUSTRY

At ITERG Group, we believe that research only truly matters when it leads to concrete applications that create value for businesses and benefit society. Our mission is to serve as the bridge between scientific advancements and industrial needs by translating the results of our research into efficient, practical, and sustainable solutions

With this in mind, we structure our work around four complementary pillars that form the foundation of our commitment to innovation, competitiveness, and the transformation of industrial sectors.



24,000

Analyses performed
by ITERG's Analyses Dept.

600

Active clients
ITERG Group

5,500

Contracts
ITERG Group

17/20

Client satisfaction
ITERG Survey

1 BUILDING ON RESEARCH IN ORDER TO INNOVATE

ITERG Groups transforms the results of its research into new services that can be directly exploited by businesses. This approach ensures that our solutions remain at the cutting edge of technology and perfectly aligned with market needs.

2 ENSURING THE EFFECTIVE TRANSFER OF KNOWLEDGE AND TECHNOLOGY

ITERG draws on a wide range of multidisciplinary expertise to support businesses at every stage of their projects, from design to scale-up. Our teams provide effective knowledge and technology transfer through:

- ▷ Specialized training
- ▷ Audits and consulting
- ▷ Support for industrial transfer

3 DEPLOYING A TAILORED APPROACH BASED ON LISTENING, EXPERTISE, AND CLOSE COLLABORATION

We place listening and partner satisfaction at the heart of our approach. Each project benefits from a personalized approach that combines scientific expertise, technical solutions, and on-site support.

By mobilizing our platforms and know-how, we help companies overcome technological, economic, and industrial hurdles.

4 STRIVING FOR EXCELLENCE AND COMPETITIVENESS

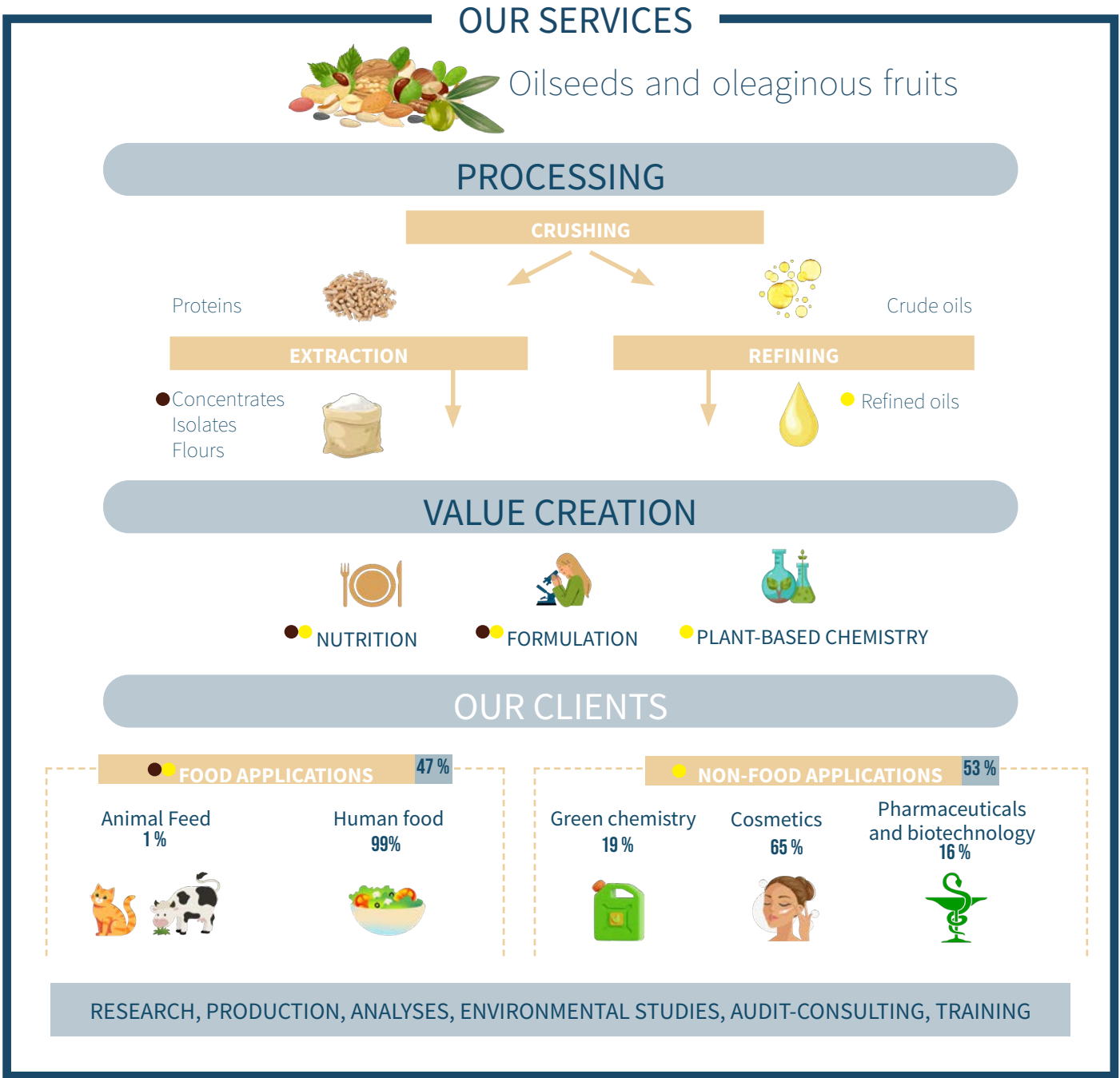
To maintain an irreproachable level of quality, ITERG adheres to recognized standards and rigorous certifications. By integrating this approach from the project-conception stage, we reinforce the dependability of results and the competitiveness of businesses in their markets.

MARKETS

ITERG Group has an integrative and evaluative service offer based on the combined expertise of ITERG and IMPROVE. It covers the entire value chain of lipids and proteins, from raw materials to final ingredients.

Thanks to a dual scientific and industrial culture, the group offers businesses tailored solutions adapted to the increasing complexity of their challenges: naturalness, sustainability, high performance, and differentiation in constantly evolving markets.

Always in movement, ITERG Group’s service offering advances in step with research and innovation in both entities. In 2024, this momentum could be seen across a range of sectors—agriculture, food, cosmetics, plant-based chemistry, and biotechnology—where our platforms and expertise drive innovations at the heart of major transitions.



Plant proteins



Vegetable oils

ADVANCING INDUSTRY, TOGETHER

Drawing on its expertise, ITERG bolsters industrial capability-building through its specialized audit and consulting, training, and process scale-up services.



Audit & Consulting:

Our engineers and experts intervene on-site to analyze processes, identify optimization opportunities, increase quality, and enhance the value of co-products. Each mission leads to an operational roadmap that includes support and implementation.



Training:

Our professional training is adapted to the challenges that businesses face and available in open-enrollment or customized formats. ITERG also offers specialized training on the use of fats in industry for engineering students, in partnership with ENSMAC.



Industrial Transfer:

The ITERG Group provides support for process scale-up from pilot trials through to the pre-industrial phases. This phase is used to fine-tune technical parameters, confirm economic feasibility, and de-risk the products' industrial development. ITERG's technology platforms ensure a reliable transfer that meets performance, quality, and sustainability requirements.

QUALITY LABELS



Fosfa international
FOSFA accreditation



ITERG training is certified by Qualiopi.



ISO 9001:2015 certification

ITERG is ISO 9001:2015 certified for all of its activities.



International Olive Council

From 1 Dec 2024 to 30 Nov 2025
IOC approval for sensory analysis, physicochemical analyses, and contaminant analysis of olive oil.



ISO 22716 certification

Good Manufacturing Practices for Cosmetics.
Workshops in the Non-Food Applications Department.



COFRAC

COFRAC no.1-0171 accreditation
Scope available at www.cofrac.fr



Services audited by Ecocert Greenlife SAS in accordance with the COSMOS standard:

- Crushing and refining organic plant-based raw materials.
- Hydrogenation, deodorization, and grinding organic plant-based raw materials.

NEW SERVICE OFFERS

A new step towards industrialization

To meet the growing needs of industry,ITERG qualified an external service provider capable of producing specialty products at a scale of several dozen tons in 2024. Thanks to this flexibility, ITERG supports its clients from laboratory development through to industrial production, including pilot batches tailored to the required volumes.

SUCCESSFUL TECHNOLOGY TRANSFERS:

ITERG has carried out successful technology transfers on specialty esters and bio-based polymers—two high-potential product families in the fields of sustainable materials, lubricants, and cosmetics.

SUPPORT ALONG THE ENTIRE VALUE CHAIN:

With this enhanced capability, ITERG now offers end-to-end support, from lab development to industrial production:

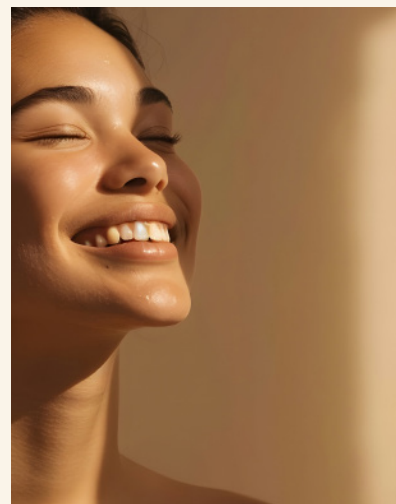
- ▷ Process development and optimization under real conditions
- ▷ Technical, economic, and environmental validation
- ▷ Transfer to partner industrial facilities
- ▷ Production of industrial pre-series

Whether it's for pilot batches, market tests, or progressive volume increases, the ITERG Group adjusts to the specific needs of each project to ensure a smooth, well-managed transition to industrial production:

a turnkey solution for industry and startups to transform innovations into market-ready products at scale.

Didier PINTORI

Process Development Engineer,
ITERG





A complete offering for startups to accelerate scale-up and market entry

The ITERG Group supports startups developing alternative fats and proteins using biotechnological processes. Our expertise covers the entire scale-up process, from raw-material selection to industrial validation.

Appropriate support for each stage:

- 1– **Raw material selection** – Identifying the sources best suited to the requirements of the biotechnological process.
- 2– **USP biotechnological process** – Carried out directly at the client's site to ensure optimal control.
- 3– **Development and scale-up** – From DSP through to the final product, to ensure efficient industrialization.
- 4– **Advanced characterization** – Functional, nutritional, and environmental analyses to validate the product's properties.
- 5– **Economic assessment** – OPEX/CAPEX analysis to secure investments and support strategic decision-making.

Tangible advantages:

- ▷ Produce the first kilograms to test and validate the concept.
- ▷ Ensure product quality and effectiveness for clients.
- ▷ Demonstrate the project's economic potential to convince investors.

Our approach relies on a structured support system and dedicated facilities to enable startups to produce their first kilograms, validate product quality with their clients, and demonstrate the technical and economic potential of their project to investors.

Jean-David LEAO
Deputy CEO,
ITERG

From process to plate: IMPROVE adds an experimental kitchen to expand its expertise

From steak to milk, cheese, and bacon, vegetarian products receive more and more attention from consumers. Many obstacles have to be overcome for these plant-based alternatives to be a success: ensuring good sensory quality, maintaining good nutritional value, and controlling the additional costs incurred to produce the final product.

In 2024, IMPROVE installed an experimental kitchen to bridge the gap between plant protein extraction processes and their performance in food applications. This new tool complements our extrusion capabilities and plant-based milk production line. IMPROVE is now equipped to develop a wide range of products: dairy alternatives (plant-based milks, yogurts, spreadable and pressed cheeses); meat alternatives (plant-based burgers, sausages); grain-based products (breads, biscuits, snack foods); and alternatives to eggs.

This application kitchen complements its laboratory in characterizing the functional, nutritional, and sensory properties of plant-based products. IMPROVE's expertise from seed to finished product provides a full panorama of plant-protein value creation.

Frédéric BAUDOUIN

Head of the Protein Characterization and Applications Division, IMPROVE



Better understanding the taste of plant protein powders

Developing plant-based proteins is a strategic challenge for the oilseed-protein sector. Through this project, ITERG is working to better characterize the sensory properties (odor, taste) of protein powders derived from various plant sources (soy, pea, lupin, lentils, etc.).

This work combines sensory analysis by our expert panel with the chemical analysis of volatile compounds (SPME-GC/MS) and aims to incorporate a large number of samples with the widest possible range of matrices and production methods. The goal is to identify the chemical markers that correlate to sensory qualities or defects in order to better select and valorize plant proteins based on their organoleptic profile.

This project simultaneously contributes to a better understanding of the links between chemical composition and sensory perception and reflects ITERG's expanding analytical expertise in the field of plant proteins.

Loïc LEITNER

Head of the R&D and Innovation Department, Analytical Development ITERG



Fat crystallization processes: ITERG expands its pilot-scale capabilities

The CRA226 pilot crystallizer from OMVE is a key piece of equipment for developing and optimizing fat crystallization processes. It replicates the conditions in industrial equipment at a pilot scale (minimum 10 kg), specifically, continuous crystallization with a scraped-surface heat exchanger. It includes two crystallization tubes and a modular agitation unit. The principle is based on passing the sample through these different units, with precisely-controlled parameters to optimize nucleation, crystal growth, and homogeneity.

Alongside trials conducted with and for industrial partners, ITERG is applying its expertise in lipid and emulsified-lipid crystallization as part of an internal project. The goal is to study and understand the impact of process parameters such as feed rate, agitation speed, and temperature profiles on the system's functional properties, while also exploring new combinations of parameters.

The crystallizer's precise control of nucleation and crystal growth allows for the production of materials that are specifically tailored to the physicochemical properties, stability, and texture required by industrial sectors such as food and cosmetics. **This project gives ITERG the capability to offer solutions that are both innovative and feasibly transferable, thus addressing current challenges in plant-based, palm-free, and other formulations where the manufacturing process plays a critical role.**

Cécile JOSEPH

Formulations Project Manager,
ITERG

ZOOM

Explore our crystallization operations in pictures: <https://youtu.be/pt9YXEdsnLk>



IMPROVE has modernized its installations with two new grinders



As part of its facility upgrades, IMPROVE recently reached a new milestone with the acquisition of two new Poittemill mills: one using discs and the other a pendulum system. These advanced pieces of equipment strengthen the company's capabilities in micronization and raw material processing, paving the way for new opportunities to valorize ingredients.

The **disc grinder** helps optimize processing operations while providing clients with increasingly efficient solutions tailored to their needs. The **pendulum grinder**, known for its energy efficiency and precision, is ideally suited for fine and ultra-fine grinding, which is key to developing high-quality functional ingredients.

These investments reflect our commitment to innovation and sustainability and reinforce IMPROVE's ambitions in the transition toward a more responsible bioeconomy. This modernization reaffirms IMPROVE's commitment to excellence and innovation in meeting tomorrow's challenges.

Amadou SIDIBE

Head of the Wet Fractionation Division,
IMPROVE



FROM EXPERTISE TO REAL-WORLD IMPACT: HOW INDUSTRY SEES ITERG

Testimonial 1 - ABOLIS
Testimonial 2 - LSDH
Testimonial 3 - INNOVERT
Testimonial 4 - EMILE GROUP
Testimonial 5 - FERMENTALG

04

TESTIMONIAL

Abolis Biotechnologies develops bioprocesses used in producing ingredients, sugars, and molecules from microorganisms. Their goal is to speed up the energy transition for major industrial groups, particularly those in cosmetics, pharmaceuticals, and chemicals.

“We worked with ITERG on a Techno-Economic Study and are currently collaborating on a Life Cycle Assessment (LCA).” We greatly appreciate the implication and work of their teams, who operated outside of their comfort zone and allowed us to carry out a study whose results exceeded our expectations.”



Cyrille Pauthenier
CEO/CSO ABOLIS



TESTIMONIAL

Fermentalg is a biotechnology company specialized in producing ingredients for food and cosmetics from microalgae. In 2025, our commercial activity is primarily focused on our DHA ORIGINS® range of high-DHA oils.

Because of the lipid nature of our products, we collaborate closely with ITERG, whether for release testing, developing formulations, or studying the nutritional benefits and bioavailability of our ingredients. Over and above their recognized scientific expertise, ITERG teams stands out for their adaptability, responsiveness, and the quality of human interactions.

This is a strategic collaboration that allows us to characterize our products better, optimize our recommendations to clients, and stay at the forefront of a constantly evolving market.

ITERG is, without hesitation, our go-to partner for any project involving lipids.



Anthony SEHL
Technical Solutions Project Manager



TESTIMONIAL



The EMILE GROUP is a French, family owned business founded in 1920, whose particular specialty is organic, virgin oils for the food and cosmetics industries. They offer a wide selection of cold-pressed virgin vegetable oils that combine quality, environmental responsibility, and upstream supply chain control, along with a broad range of innovation-driven grocery products.

We've collaborated with ITERG for several years on several themes, most often related to their analytical expertise. Recently, the Formulation team helped us to valorize our co-products and flours for the food and cosmetics sectors—from concept exploration and validation through to prototype formulations that will soon be showcased at trade fairs.

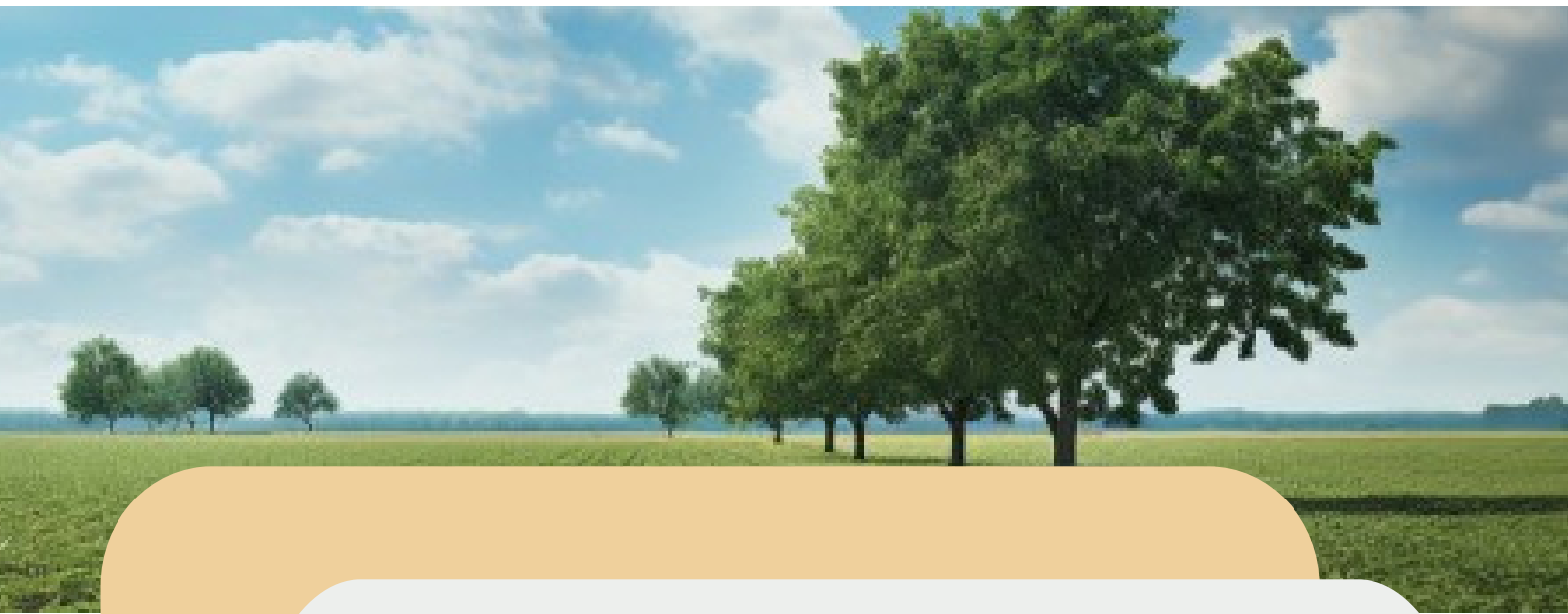
With ITERG, we found scientific expertise that directly applies to solving practical and industrial concerns, enabling us to explore and then confidently pursue new opportunities for our products. We particularly appreciate their quick understanding of our challenges and their adaptation to our needs. The ITERG team is responsive and has an excellent level of expertise. They provide undeniable added value to our projects.



Marion DUMONT
Operational Quality Manager



TESTIMONIAL



Innovert is a research and development center dedicated to valorizing plant-based raw materials through the development of innovative processes.

The core mission at Innovert is to develop semi-finished products that will be used to produce plant-based foods such as beverages, desserts, cheeses, and more.



This work is part of a global farm-to-fork approach that emphasizes the use of local sustainable crops. The products we develop must meet consumer expectations by combining taste and nutritional quality while minimizing the environmental impact of the processes used to make them and taking current economic constraints into consideration.

Working with ITERG Group has allowed us to speed up the development of our processes.

The diversity of their equipment and the flexibility, competence, and know-how of their teams are qualities that have led us to choose ITERG Group to support us in our current and future projects.



Jérôme SCHWAB
R&D Director, Innovert





TESTIMONIAL



Originally founded as an independent dairy in 1909, our family-owned LSDH Group now operates across France with 11 production sites and over 2,000 employees. Our activities are organized around two divisions: a Liquid Division (milk, juice, soft drinks, plant-based beverages) and a Plant Division (fresh fruits and vegetables, herbs, prepared salads), with expertise that spans from raw material sourcing to delivery across all distribution channels (retail, foodservice, etc.).

We're committed to reducing our environmental footprint through the initiative we dubbed UNIV'AIR. This initiative combines raising awareness among our employees and stakeholders, comprehensive accounting of our GHG emissions, and the implementation of an ambitious yet pragmatic action plan.

The starting point for our climate and decarbonization strategy was a Carbon Footprint assessment of our activities. We entrusted its execution to ITERG's Environment and Eco-Industries Unit, and the collaboration has been very positive. We want to highlight in particular the quality of the team's work, their technical expertise, and their methodical approach to this large-scale project. In addition to the technical support, their human qualities helped engage our teams throughout the project and made it easier for us to integrate and take ownership of the results and the emissions-reduction action plan.

Building on our partnership and trusted relationship, we are once again entrusting ITERG with monitoring and updating our Carbon Footprint assessment!



Stéphanie ANTON
CSR Manager, LSDH Group





APPENDICES

- Appendix 1 - Scientific Committee
- Appendix 2 - Publications
- Appendix 3 - Oral Presentations
- Appendix 4 - Posters
- Appendix 5 - Qualifications
- Appendix 6 - Contacts

SCIENTIFIC COMMITTEE

as of 13 Nov 2024

PRESIDENT

Mr. **Olivier GALET**, Head of R&I Proteins, AVRIL Group

REPRESENTATIVE OF THE PUBLIC AUTHORITIES

Ms. **Maud IACOMELLI**, Ministry of Agriculture and Food, DGPE/SDFE/SDFA/BGC

Ms. **Laure GRISAT**, Deputy Director of Chemistry, Materials and Eco-industries, Ministry of Economy and Finance - DGE

Mr. **François-Xavier TURQUET**, Project Manager biosourced chemistry and industrial biotechnologies, Ministry of Economy and Finance – DGE

INDUSTRIAL MEMBERS

Mr. **Henri BENATS**, Sales Manager Technical Applications, CARGILL

Ms. **Anne CHIVARD**, QSE Manager, La Tourangelle

Mr. **Edouard CASALA**, Head of Regulatory and Scientific Affairs, BUNGE

Ms. **Gwenaëlle APPRIOU**, FSQR Manager, CARGILL France

Mr. **Jean-Pierre LALLIER**, Head of Monitoring & External Relations Innovation, OLEON

Ms. **Béatrice LEMOIS**, Quality R&D Director St HUBERT

Mr. **Frédéric CELHAY**, R&D Manager, LESIEUR

Ms. **Julia RONNET**, R&D Development Manager, ADM SIO

Ms. **Isabelle LEMARIE**, Quality & Innovation Director, SAIPOL GROUPE AVRIL

Ms. **Amandine HENNOcq**, Quality Manager R&D and Laboratory, DAUDRUY

PROFESSIONAL BODIES

Mr. **Hubert BOCQUELET**, General Delegate, FEDALIM, FNCG, SYFAB

Ms. **Elodie TORMO**, Head of Innovation and Monitoring, TERRES UNIVIA

COMPETENT PERSONALITIES

Mr. **Frédéric FINE**, Director Oilseed Development, TERRES INOVIA

Mr. **Michel LAGARDE**, Emeritus Professor, INSA Lyon

Mr. **Michel LINDER**, Professor, ENSAIA

Mr. **Didier MAJOU**, Director, ACTIA

Ms. **Marie-Caroline MICHALSKI**, Research Director, INRAE, GIS IMBL

Mr. **André POUZET**, President ACTIA, corresponding member of the Academy of Agriculture, section 1 Plant Production

Mr. **Pierre VILLENEUVE**, CIRAD Research Officer

Mr. **Stéphane WALRAND**, University Professor - PH Université Clermont Auvergne and CHU Gabriel Montpied-UNH

Mr. **Frédéric CARRIERE**, Research Director, CNRS

Mr. **Frédéric BAUDOUIN**, Laboratory Manager, IMPROVE

PERMANENT GUESTS

Ms. **Isabelle CHASSEDIEU**, regulatory and scientific affairs officer - labelling, fnCG

Mr. **Tofike CHRIFI**, regulatory and scientific affairs officer - contaminants/environment, fnCG

Mr. **Yves DELAINE**, president, fnCG, improve, iterg

Ms. **Anne LE GUILLOU**, lipids senior team leader, r&i advanced techno ingredients team, danone – president of sfel

Mr. **Patrick CARRE**, oils, oilseed and pulses processing, terres inovia

PUBLICATIONS

HEALTH NUTRITION



- ▷ Associations between polyunsaturated fatty acids in the adipose tissue and the mortality of colorectal cancer patients
Nutrition, vol. 121, 2024
C. ROUX-LEVY, C. BINUET, C. VAYSSE, M.L. SCHERRER, A. AYAV, P. ORTEGA-DEBALLON, Z. LAKKIS, D. LIU, S. DEGUELTE, V. COTTET
- ▷ Are oilseeds a new alternative protein source for human nutrition?
Food & function, n°5, 2024
L. TOUTIRAIS, S. WALRAND, C. VAYSSE
- ▷ In Vivo Absorption and Lymphatic Bioavailability of DHA from Microalgal Oil according to Its Physical and Chemical Form of Vectorization
Nutrients, vol. 16, n°7, 2024
L. COUËDELO, L. LENNON, S. ABROUS, H. CHAMEKH, I. BOUJU, C. GRIFFON, H. VAYSSE, C. LARVOL, L. BRETON,
- ▷ Plant proteins: are they a good alternative to animal proteins in older people?
Current opinion in clinical nutrition and metabolic care, 2024
L. TOUTIRAIS, C. VAYSSE, M. GEUGNEAU, S. WALRAND
- ▷ Reduced Production of Pro-Inflammatory and Pro-Catabolic Factors by Human Serum Metabolites Derived from a Patented Saffron Extract Intake
Pharmaceutics, vol. 16, n°3, 2024
L. POURTEAU, F. WAUQUIER, L. BOUTIN-WITTRANT, D. GAUDOUT, B. MORAS, A. VIGNAULT, C. VAYSSE, T. RICHARD, A. COURTOIS, S. KRISA, V. ROUX, N. MACIAN, G. PICKERING, Y. WITTRANT
- ▷ Characterization of Crocetin Isomers in Serum Samples via UHPLC-DAD-MS/MS and NMR after Saffron Extract (Safr'Inside™) Consumption
Metabolites, vol. 14, n°4, 2024
A. VIGNAULT, C. VAYSSE, K. BERTRAND, S. KRISA, A. COURTOIS, B. MORAS, T. RICHARD, D. GAUDOUT, L. POURTAU

TECHNOLOGY



- ▷ Cadmium partitioning between hulls and kernels in three sunflower varieties: consequences for food/feed chain safety
Environmental science and pollution research, vol. 31, 2024, p. 1674-1680
C. NGUYEN, JP LOISON, C. MOTARD, S. DAUGUET

PLANT CHEMISTRY



- ▷ Rheological characterization of an alternative binder to petroleum bitumen, produced from waste cooking oils
In : Bituminous mixtures and pavements VIII, 2024, CRC Press
M. DEBELLO, B. TAPIN, O. BURBAN, S. LAVAUD, V. GAUDEFRY, C. QUÉFFLEC, G. CHOLLET, J. CANTOT, E. CHAILLEUX

QUALITY PRODUCT SAFETY



- ▷ Evaluation du Plan de Surveillance des Oléoprotéagineux (PSO) par la méthode OASIS
Bulletin épidémiologique, santé animale et alimentation, 2024, volume 101, article 5
M. BARENSCHTRAUCH, A. DROUIN, S. DAUGUET, F. LACOSTE, I. DE LA BORDE, L. KRIEGER, H. BERNARD, E. GAY

ORAL PRESENTATIONS

ANALYSE



▷ Huiles minérales d'origine animale et végétale : les normes volontaires à la rescousse pour préserver notre santé
L. LAGARDÈRE, F. LACOSTE | WEBINAIRE GROUPE AFNOR NORMALISATION

▷ ISO method development & new trends in mineral oil hydrocarbon analysis
L. LAGARDÈRE | COMITÉ TECHNIQUE GOED, 11 AVRIL 2024

▷ Les huiles minérales (MOSH & MOAH)
L. KRIEGER | ASSEMBLÉE GÉNÉRALE OQUALIM, 30 MAI 2024, PARIS

▷ Huiles d'olive et contaminants : point à date et focus sur les MOSH MOAH
L. LAGARDÈRE | CONFÉRENCE ANNUELLE TECHNO'HUILE, 7 JUIN 2024, NÎMES

PLANT CHEMISTRY



▷ Cartographie des activités d'ITERG, de la matière première aux valorisations marché.
L. BERNARD, B. BIZET | SÉMINAIRE CHERCHEURS 3BCAR, 25-26 JANVIER 2024, MONTPELLIER

▷ Vegetable oil-based hyperbranched materials - Synthesis and derivatization towards new properties
B. BIZET | WORKSHOP ON FATS AND OILS AS RENEWABLE FEEDSTOCK FOR THE CHEMICAL INDUSTRY, 3-5 JUIN 2024

▷ La gamme PRIC : des polyesters biosourcés : point à date et perspectives
M. REULIER | POLYMERIX 2024, 26-28 JUIN 2024, RENNES

▷ The PRIC products: R&D and production strategy
G. CHOLLET, A. LEROY | BIOMASS VALORIZATION SUMMIT, FROM IDEA TO MARKET, 15 OCTOBRE 2024, COMPIÈGNE

▷ The PRIC products: R&D and production strategy
G. CHOLLET, A. LEROY | BIOMASS VALORIZATION SUMMIT, FROM IDEA TO MARKET, 15 OCTOBRE 2024, COMPIÈGNE

PROTEINS



▷ Understanding the determinants of pea protein functional quality: impact of protein composition, protein denaturation and non-protein components
F. BAUDOUIN | CONGRÈS ANNUEL AOCS, 28 AVRIL -1ER MAI 2024

▷ What determines plant protein functionality?
F. BAUDOUIN | BRIDGE2FOOD NORTH AMERICA, 8-10 OCTOBRE 2024

▷ Fermentation & DSP applied to food market : R&D and production strategy
A. MERMOURI, K. NGUYEN | BIOMASS VALORIZATION SUMMIT, FROM IDEA TO MARKET, 15 OCTOBRE 2024, COMPIÈGNE

ENVIRONMENT



▷ Démarche d'écoconception appliquée à des filières alimentaires sous signe officiel de qualité
B. BONNET, F. BOSQUE, L. CHUPIN, L. LAURENT, G. VERGNES | JOURNÉES ALIMENTS SANTÉ, 19-20 JUIN 2024, LA ROCHELLE

▷ Comment abaisser le score environnemental des produits alimentaires en jouant sur les modes de production ?
F. BOSQUE | CONFÉRENCE ADRIA «VERS UNE ALIMENTATION DURABLE : CONTRIBUTION ET RÉFLEXIONS AUTOUR DU PROJET PLAN P» ? 18 JUIN 2024, RENNES

▷ Enrichir les inventaires de cycle de vie des emballages alimentaires pour AGRIBALYSE, base de données de référence pour l'affichage environnemental et l'éco-conception des produits alimentaires
C. VIALATTE | CONGRÈS MCV (MANAGEMENT DU CYCLE DE VIE), 13-14 NOVEMBRE 2024, LILLE

ORAL PRESENTATIONS - CONT.

ENVIRONMENT



Améliorer la performance environnementale de l'aliment par l'éco-conception
F. BOSQUE | JOURNÉE TECHNIQUE ENVIRONNEMENT ECOQUALINA, 15 NOVEMBRE 2024, PESSAC

Présentation du projet ECOQUALINA, son bilan et ses perspectives
F. BOSQUE | JOURNÉE TECHNIQUE ENVIRONNEMENT ECOQUALINA, 15 NOVEMBRE 2024, PESSAC

Affichage environnemental des produits alimentaires
F. BOSQUE | JOURNÉE TECHNIQUE ENVIRONNEMENT ECOQUALINA, 15 NOVEMBRE 2024, PESSAC

Filière du Pruneau d'Agen : quand les filières se mobilisent pour réduire leur impact
F. LEROY | JOURNÉE TECHNIQUE ENVIRONNEMENT ECOQUALINA, 15 NOVEMBRE 2024, PESSAC

FORMULATION



Contexte et enjeux applicatifs pour la formulation des biosolutions
C. JOSEPH | TECHDAY, 6 FÉVRIER 2024, LILLE (BIOECONOMY FOR CHANGE)

NUTRITION



Les nouveaux enjeux de l'agroalimentaire autour des protéines végétales
D. CHÉREAU | FOODHACK MEETUP 2024, 17 JANVIER 2024

Protéines végétales et alternatives : quels choix disponibles entre process, fonctionnalités et nutrition
M. KADI | JOURNÉES ALIMENTS SANTÉ, 19-20 JUIN 2024, LA ROCHELLE

Review of the uses of eggs in food applications and commercial plant-based protein substitutes
M. GENOT | CONGRÈS ANNUEL AOCS, 28 AVRIL, 1ER MAI 2024

La digestibilité des protéines oléagineuses : importance de la composition de la matrice et impact des lipides
L. TOUTIRAIS | WEBINAIRE SFEL JEUNES CHERCHEURS, 28 JUIN 2024

Emulsification des lipides comme voie d'amélioration de la biodisponibilité des acides gras d'oméga 3 à longue chaîne
L. COUDELO | CONFÉRENCE ADEBIOTECH, 16-17 OCTOBRE 2024

TECHNOLOGY



From protein extraction to food matrix, which process for which application
M. KADI | VITA'CONNECT, 4 AVRIL 2024

Optimizing protein extraction processes
A. MERMOURI | BRIDGE2FOOD EUROPE, 4-6 JUIN 2024, LA HAYE (PAYS-BAS)

Sunflower: oils and proteins extraction, waste stream valorization, quality control
A. SIDIBÉ, JP LOISON | BIOMASS VALORIZATION SUMMIT, FROM IDEA TO MARKET, 15 OCTOBRE 2024, COMPIÈGNE

POSTERS

ANALYSE



- ▷ Développement d'une méthode d'analyse sensorielle des poudres de protéines végétales

S. GELIN, F. BAUDOUIN, E. TORMO, L. LEITNER, F. LACOSTE | CIRAD 4ÈMES RENCONTRES FRANCOPHONES SUR LES LÉGUMINEUSES, 22-24 JANVIER 2024

PLANT CHEMISTRY



- ▷ PRlcEPOX: Polyacides ricinoléiques (PRlc), fonctionnalités via la synthèse de synthons époxydés (EPOX)

B. BIZET | SÉMINAIRE 3BCAR, 25-26 JANVIER 2024, MONTPELLIER

NUTRITION



- ▷ Effet de la gomme d'acacia sur la biodisponibilité des acides gras polyinsaturés oméga-3 chez le rat

L. COUÉDELO | CONGRÈS IFCD (INTERNATIONAL CONFERENCE ON FOOD DIGESTION), 9-11 AVRIL 2024, PORTO

- ▷ Comparaison entre les modèles in vivo et in vitro sur la biodisponibilité des composés lipidiques

L. COUÉDELO | CONGRÈS IFCD (INTERNATIONAL CONFERENCE ON FOOD DIGESTION), 9-11 AVRIL 2024, PORTO

- ▷ Interactions protéines-lipides au cours de la digestibilité in vitro des graines oléagineuses

L. COUÉDELO | CONGRÈS IFCD (INTERNATIONAL CONFERENCE ON FOOD DIGESTION), 9-11 AVRIL 2024, PORTO

- ▷ Impact of structuring DHA in marine lipids on its intestinal absorption and metabolic fate

L. COUÉDELO | 19TH GERLI LIPIDOMICS, 23-26 SEPTEMBRE 2024, BREST

QUALIFICATIONS



EXECUTIVE TEAM AND OPERATIONAL LEADS

Governance



Yves DELAINE

President of ITERG, IMPROVE



Paul-Joël DERIAN

ITERG Vice-President



Denis CHEREAU

ITERG/IMPROVE CEO



Jean-David LEAO

ITERG Deputy CEO

Analysis and Expertise

Canéjan



Franck DEJEAN

Department
Head



Lionel LAGARDERE

Head
of Production



Laura BRUNSARD

Business Manager



Hugues GRIFFON

Business Manager



Loïc LEITNER

Head of Analytical Research
& Development

R&D Analysis

Environment and Eco-Industries

Canéjan



Fabrice BOSQUE

Unit Head



Lou BERNARD

Project Manager



Antoine BESNIER

Project Manager



Cyntia VIALATTE

Project Manager

Cross-functional Roles

Canéjan



Benjamin BUAUD

Research Coordination



Claudie GESTIN

Information Monitoring
Communication



Marianne TRICHARD

Corporate Training



Patrick LE RUNIGO

Cross-functional Projects

Protein characterization

Dury



Frédéric BAUDOUIN

Division Head



Marwa KADI

Project Manager



Mélanie GENOT

Project Manager

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Carole VAYSSE

Unit Head



Benjamin BUAUD

Project Manager



Leslie COUEDELO

Project Manager

Industrialization and R&D

Canéjan



Guillaume Chollet

Head of Department



Boris BIZET

Project Manager
Plant-Based Chemistry



Cécile JOSEPH

Project Manager
Formulations



Marie REULIER

Project Manager
Plant-Based Chemistry



Jérôme VILA

Head of the Pilot
and Semi-industrial Workshop



Audrey COMITIS

Head of the Crushing
and Refining Workshop



Alejandro JIMENEZ

Head of R&D,
Crushing-Refining



Jean Philippe LOISON

Assistant Engineer

Process

Canéjan



Didier PINTORI

Head of
Process Development

Wet & Dry Fractionation

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Amadou SIDIBE

Division Head



Hugo MEAR

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Abderrafik MERMOURI

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Head of Quality,
Safety & Environment



Nathalie HERVY

Head of Human Resources



Mélanie LUPI

Head of Accounting

Business Development

Canéjan



Marion CLEMENS

Canéjan



Fabrice FARRUGIA

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Patrick LE RUNIGO

Dury



Julie MANESSE



ITERG - IMPROVE

Committed to a healthier, more eco-friendly world

Integrated activity report 2024



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